



Volume 23

An ARCEC Monthly Publication

February 2014

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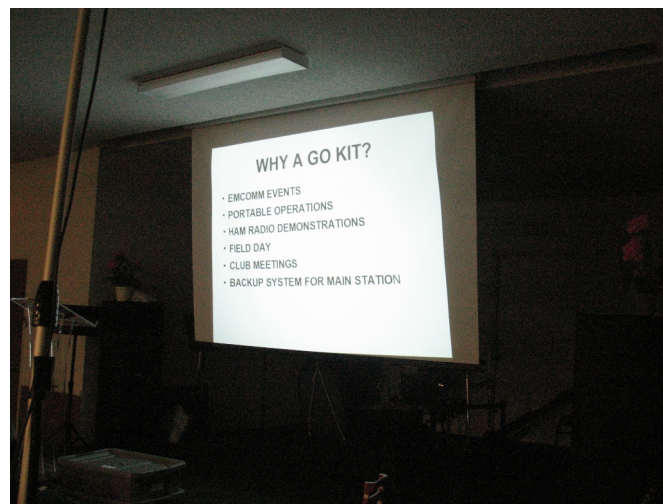
## The Ultimate Go Kit

By Sue Robins AF6LJ &amp; Pat Bunsold WA6MHZ

### The Ultimate Go Kit

Pat Bunsold WA6MHZ Club President gave a presentation on his Ultimate Go Kit he homebrewed, and was first seen at the Fry's Operating Day event. Go Kits can take the form of an HT in a sack with a spare battery up to and beyond trailers with crank up masts and mobile repeater systems operating on several bands, and with several modes at the same time. While the Ultimate Go Kit is not trailer requiring a half ton pickup truck to tow, it is by no means an HT dropped in a sack with a spare battery.

The Ultimate Go Kit is capable of running off battery power as well as AC, contained in the housing is a battery booster / regulator to maintain 13.8V DC for operation of the Yaesu FT-857D, the heart of the Ultimate Go Kit. Voltage and current are monitored continuously by way of a front mounted control panel. Complete control of which power source is accessible from the front panel, battery terminals are provided on the side of the housing for easy access.



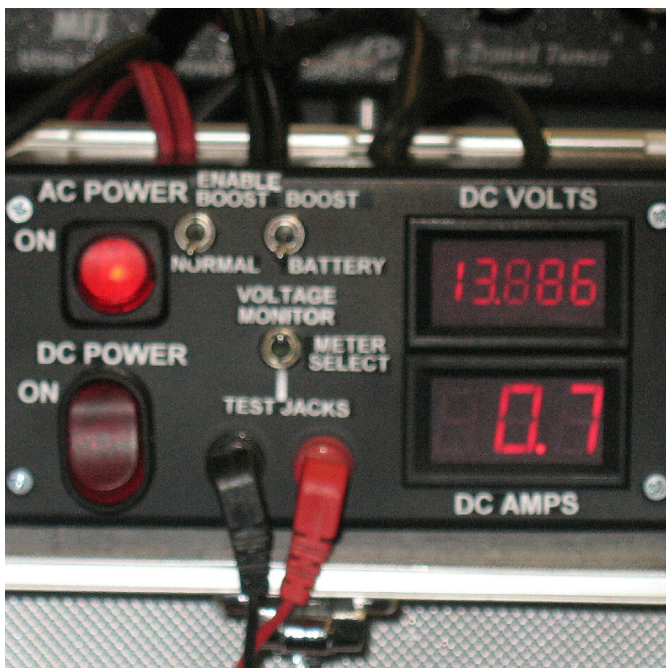
A digital interface is built into the Ultimate Go Kit for both remote control by computer, and to accommodate the various digital modes of operation in use by amateur radio operators. The housing for the Ultimate Go Kit is outfitted with 2 antenna connectors, one for 2 meters and 440 MHZ, and the other for HF / 6 Meters.

### ARCEC Repeater Frequencies

2 Meter Repeater	220 MHZ Repeater	440 MHZ Repeater
TX 146.475	TX 220.480	TX 440.900
RX 147.420	RX 224.080	RX 445.900
Offset .945	Offset 1.6	Offset 5.00
PL 107.2	PL 107.2	PL 107.2







Pat demonstrated the Ultimate Go Kit as a part of the presentation, using the computer to remotely control the radio's functions.

One aspect of this project that should not go without mention is the ease of which a tool case from a local discount tool supply house was converted into a communications center that is self contained and will operate off most available sources of power. The use of locally available parts, an inexpensive battery booster module found on E-Bay, and an afternoons work have produced a first class emergency communications tool.

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## Club Happenings

It was announced at the February meeting the board will be changing their meeting date and time to the second Thursday of the month starting at 6:00 PM. The time and day change was made to more easily accommodate the needs of the board members, as some were having scheduling issues.

The club also voted to allow conditional use of the tower trailer for the Baker to Vegas Run on March 22, 2014 for communications related to the race.

ARCEC is invited to participate in the Fry's Electronics Operating Day by the San Diego Six Shooters the event will be held this coming April. Stay tuned for the exact date of the event. The Operating Day Event brings clubs together from all over the county showing the general public aspects of amateur radio.

The club was also informed that our President Pat WA6MHZ will be reentering the hospital on March 11, 2014 for an issue related to his hospitalization in December of last year. Send your prayers and positive thoughts his way as I shall be doing.

2013 Awards; if you served on the board or in another recognized capacity in 2013 you likely have a certificate of appreciation waiting for you if you have not already received this recognition for your good work.



Dave received his plaque for Ham of the Year at the last meeting

Along with Jack N6FUG who received a certificate for his service on the board for 2013.

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## Editor's Notes

We are one the last users of the RF spectrum to refer to where we operate by the frequency of operation. One of the few places you can still find this practice in use is commercial AM and FM broadcasting where the frequency of operation is a key part of the station's identity. It would be clumsy to identify a television station by its frequency since for so many years a television signal consisted of a video carrier frequency and an audio carrier frequency, but going back to its beginnings the television channels have been shuffled around the VHF spectrum and a large portion of the UHF channel set was lost altogether. FM land mobile has been channelized since day one, so has the aeronautical and HF and VHF marine services. When VHF FM started gaining in popularity among amateur radio operators they adopted the use of discreet channels for the FM portion of those bands, even the ten meter FM portion is broken up into discreet channels.

Now with the possibility of gaining access to more bandwidth in the band that is known as the 60 Meter band the concept of channels is being revisited. Everywhere you go in the HF spectrum where there are voice CW or Utility transmissions taking place you find those frequency bands are broken up into discreet channels. The 60 Meter band we share with government users is no

exception, and that is the only place in HF where amateurs are allowed to operate that you can't just "spin your VFO". This freedom to talk where you wish doesn't exist in the commercial two way radio world, and because it doesn't co-channel interference is kept to very low levels, and in some places nonexistent. Thanks to being at the right at the right time, I was lucky enough to get all the frequencies used by Dick Rutan and Jeana Yeager for their epic 9 day flight around the world on one tank of gas, I was able to follow the entire trip on HF with no more than several large pots of coffee, my Icom IC-745 and a 40 Meter dipole up a quarter wave off the ground. I was able to copy nearly all of the flight and it was because they were operating in a radio service that used allocated channels. If they had used amateur bands for communications there would have been intolerable amounts of co-channel interference at times.

I am not in favor of channelizing 20 or 40 Meters, this is wrong to me on so many levels. Most of time the natural order of things sees to it. We manage to maintain reasonably good communications quality, even on 20 Meters most days. What I am driving at here is, our future; if amateur radio operators want more HF spectrum, the pathway to having that spectrum into other's spectrum on a shared basis. The acceptance of already allocated channels and bandwidth restrictions is a very small price to give up. This is our future should we choose to adopt it, a future where if you and your rag chew buddies are having difficulty due to propagation dropping a MHZ or 2 in order to communicate with "arm chair copy" is the order of the day, not a dream. If there are downsides to this a couple come to mind, like the new legal limit on power output. I wouldn't expect to see a huge volume of DX activity due to different countries regulating the same spectrum in different ways. We share 30 Meters, we had to share 160, and boy was that a complicated mess of when where and how much power you could run, We share 440 MHZ here on the west coast with the military, we have taken these situations and made well of them, there is so much potential for amateur radio the path 60 Meters has put us on, some day we could end up with the use of most of the HF spectrum, I think that will come soon, in my lifetime and yours. For more information on

the 60 Meter amateur band visit  
<http://hfink.com/5mhz/>

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As usual if you have something you would like to see in Counterpoise send that content to [counterpoise@wa6bgs.us](mailto:counterpoise@wa6bgs.us) You are what makes the Amateur Radio Club of El Cajon, we wouldn't exist without you the membership. Join us at our meetings and activities and become a part of the club.

## Club Shirts & Jackets

We have 2013 club shirts and jackets available at meetings and from the club website. Shirts are available sizes from small to XX large, this year's shirt has a pocket and as usual is green in color with the club logo in white. The cost is \$12.00 each. You can get a 2013 Field Day shirt or the standard club shirt, both styles of shirts have the club logo on the back and the left side.

Jackets are also available in sizes ranging from Medium to XX large. These are of the lined windbreaker style, with side pockets and they snap down the front. The cost is \$24.00 each.

We also have a number of shirts from 2012, these shirts are identical to the 2013 shirts without the pocket, and they are available in both the standard club shirt and the 2012 Field Day shirt. Sizes are limited to stock on hand. For more information regarding our club shirts see; <http://wa6bgs.us/2013-club-shirts-and-jackets/>

## Next Month's Meeting

The speaker for next month's meeting is to be announced. A reminder that just prior to the general meeting the Board of Directors will hold their meeting in the same space beginning at 6:00 PM, all members are welcome.



Early bird registration has begun for the 2014 ARRL Southwestern Division Convention to be held September 12-14 at the Four Points By Sheraton. For more information visit; <http://www.sandarc.net/>

## 60 Meter Fast Facts

Channels used in the US and Alaska.

5330.5 KHZ, 5346.5 KHZ, 5357.0 KHZ, 5371.5 KHZ, and 5403.5 KHZ. Alaska Only, and for Emergency use, 5167.5 KHZ. Voice operation is upper sideband only. There is a lot of confusion over the channel frequency and the channel center frequency, for sideband use all one need know is the channel frequency.

